

Notice of Allowability

Application No.

10/628,063

Examiner

Erica E. Cadugan

Applicant(s)

LAWSON, DOUGLAS K.

Art Unit

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed 4/21/2005.
2. ☒ The allowed claim(s) is/are 1-15, 17-19 and 31-40.
3. ☒ The drawings filed on Figs 1-7 & 10 f. 7/25/03 & Figs 8-9 f. 3/5/04 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 4/21/2005
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Supplemental REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

In addition to the reasons for allowance mailed March 16, 2005 (which are still applicable), Examiner also notes the following:

It is noted that U.S. Pat. No. 4,798,024 to Grimm and DE 4242874 ('874) were both cited on the IDS filed 4/21/05, and that both bear certain similarities to the present invention.

However, it is noted that neither Grimm nor '874 anticipate or render obvious the present invention as set forth in the independent claims 1, 14, 31, 35, and 40.

Specifically regarding Grimm, Grimm teaches a deburring device including a grinder unit 1 having a housing (see the Figure). A not-shown drive turbine is housed within the housing for driving a grinding spindle 11 (the Figure and col. 3, lines 12-14, for example). Mounted at the "front end" of the spindle 11 is a deburring tool 2 (the Figure). Additionally, supported on the "back wall" of the housing is a "connector" 12. It is noted that the connector 12 is connected to a "spherical pivot" 14' (see the Figure) that serves to eccentrically drive the grinder unit via rotation of rotatable member 16, and thus, the "spherical pivot" permits the drive turbine to move relative to and "with" the "spherical pivot".

However, note that the only structure that could remotely be considered a "compliance device" would be the compression spring 20 (see the Figure).

Re claims 1, 31, 35, and 40, even assuming arguendo that the drive turbine is considered a pneumatic motor or alternatively assuming that it would have been obvious to have substituted a pneumatic motor for the described drive turbine, the compression spring 20 does not extend "around the pneumatic motor" at all, and definitely does not extend around it "at a location

Art Unit: 3722

between the back wall and the front end of the spindle for centering the pneumatic motor but wherein the compliance device is yieldable in response to the deburring device encountering a disturbing force” as set forth in independent claims 1, 31, 35, and 40.

It is further noted that to supply the device of Grimm with such a compliance device would preclude Grimm’s device from functioning as intended, noting that the deburring tool 2 of Grimm is able to function to deburr as described because of the wobble or oscillation introduced by the rotation of eccentric drive 16 about axis 17 (see the Figure, also col. 4, lines 10-36, for example).

Re independent claim 14, Grimm does not teach that the “connector” 12 includes any sort of “terminal end” that “extends into the opening of the pivot bearing” (14’), “wherein an opening is formed within the terminal end of the connector for receiving a spreading plug that spreads the terminal end of the connector into engagement with the pivot bearing” as set forth in independent claim 14.

For at least the foregoing reasoning, Grimm does not anticipate the present invention as set forth in the independent claims. Also, there is no combinable teaching in the prior art of record that would reasonably motivate one having ordinary skill in the art to so modify the teachings of Grimm, and thus, for at least this and the foregoing reasoning, Grimm does not render obvious the present invention as set forth in the independent claims.

Specifically regarding ‘874, ‘874 teaches a deburring device (see abstract) wherein tool bit 9 is mounted in a spindle having chuck 34 that is driven in rotation by motor 8 (Figure 1, abstract). The motor 8 pivots relative the workpiece via a swivel pivot 27 (see Figure 1,

Art Unit: 3722

abstract). Additionally, Figure 1 shows the use of springs 29, considered a “compliance device” of sorts.

However, it is noted that, among other issues, ‘874 does not teach that the “compliance device” 29 extends “around” the motor “at a location between the back wall and the front end of the spindle for centering the pneumatic motor but wherein the compliance device is yieldable in response to the deburring device encountering a disturbing force” as set forth in independent claims 1, 31, 35, and 40.

Also, re independent claim 14, ‘874 does not teach any sort of “connector extending between the back portion” of the motor “and the pivot bearing” for connecting the motor to the pivot bearing such that the motor moves with the movement of the pivot bearing, wherein the “connector” includes any sort of “terminal end” that “extends into the opening of the pivot bearing” and “wherein an opening is formed within the terminal end of the connector for receiving a spreading plug that spreads the terminal end of the connector into engagement with the pivot bearing” as set forth in independent claim 14.

Also, there is no combinable teaching in the prior art of record that would reasonably motivate one having ordinary skill in the art to so modify the teachings of ‘874, and thus, for at least the foregoing reasoning, ‘874 neither anticipates nor renders obvious the present invention as set forth in independent claims 1, 14, 31, 35, and 40.

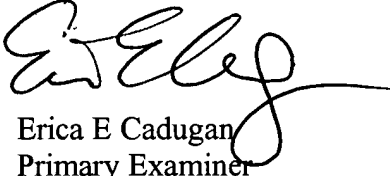
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Art Unit: 3722

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erica E. Cadugan whose telephone number is (571) 272-4474. The examiner can normally be reached on M-F, 7:30 a.m. to 5:00 p.m., alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris H. Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Erica E Cadugan
Primary Examiner
Art Unit 3722

eec
June 9, 2005